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ABSTRACT

The occupational survey's purpose was to identify the skills which are performed and essential for success in three veterinary lay occupations: animal health assistant, animal hospital receptionist, and animal health technician. Survey objectives were accomplished by constructing an initial task inventory of 21 duty areas, validating the initial inventory, and conducting a random survey of 100 veterinarians. A computer analysis of the 40 survey responses resulted in a computation of frequencies and means for each task statement. The analyses findings cover the 268 specific tasks performed in each of the three veterinarian lay occupations, the relative importance of the specific task, and a comparison among the three occupations for each task statement. The findings are supported by tables showing the statistical means and frequencies. A 16-item bibliography is appended. (BP)

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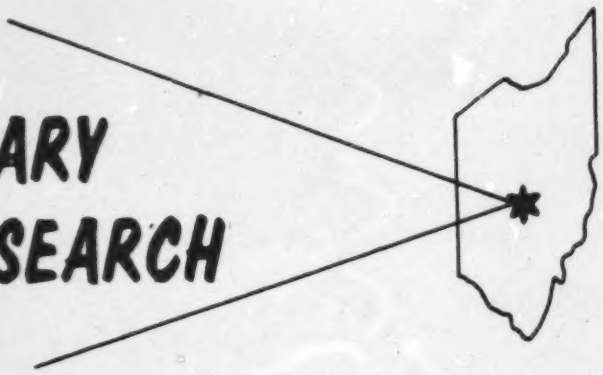
SUMMARY OF RESEARCH



DEPARTMENT OF AGRICULTURAL EDUCATION

The Ohio State University
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JUL 24 1975

A COMPARATIVE ANALYSIS OF TASKS ESSENTIAL TO SUCCESSFUL PERFORMANCE IN THREE VETERINARIAN LAY OCCUPATIONS

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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by

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The number of persons employed in the veterinarian lay occupations has been increasing. Three occupations included in this trend are the Animal Health Assistant, Animal Hospital Receptionist, and Animal Health Technician. However, specific responsibilities for each of these occupations have not been well-defined. A more specific delineation of tasks essential for successful performance was needed to assist educational institutions desiring to develop training programs to prepare workers who might qualify for employment.

Purpose and Objectives

The major purpose of the occupational survey was to identify the skills which are performed and essential for success in each of three veterinary lay occupations. The specific objectives were to:

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A COMPARATIVE ANALYSIS OF TASKS ESSENTIAL TO SUCCESSFUL PERFORMANCE IN THREE VETERINARIAN LAY OCCUPATIONS

1. Develop and validate an initial task inventory.

2. Identify the specific tasks performed by incumbents in each of three veterinarian lay occupations.

3. Determine the relative importance of the specific tasks to the successful employment of veterinarian lay personnel in the three occupations.

4. Analyze each task across the three occupations to provide information for decision-making in educational preparation programs.

Animal health technicians generally receive two years of post-secondary education or the equivalent in on-the-job training. Animal hospital receptionists usually have limited training other than on-the-job. Some animal health assistants have had two years of vocational education, but most have had no prior experience or training prior to entering the occupation.

METHODOLOGY

Objectives were accomplished by constructing an initial task inventory, validating the initial inventory, selecting a sample of incumbents, collecting data, and analyzing data.

Initial Task Inventory

Duty areas and task statements for the veterinary lay occupations were identified by searching existing publications and books. Additionally, contacts with instructors of veterinary assistant programs at both the secondary vocational school and the technical school levels assisted in clarifying the specific responsibilities in these occupations. All the tasks were assembled into one composite list.

The initial tasks were grouped into functional areas called duties. The duty areas defined for the veterinary lay occupations were:

1. Performing general office work
2. Interpreting medical terminology
3. Recording information
4. Handling and caring for animals
5. Feeding animals
6. Grooming animals
7. Performing examining-room work
8. Performing laboratory tests
9. Dispensing medicine and supplies
10. Administering medication
11. Assisting in restraining animals
12. Assisting with X-rays
13. Using and maintaining surgical equipment and small animal care equipment
14. Preparing facilities and equipment for surgery
15. Preparing animals for surgery
16. Performing emergency first aid
17. Inventorying products
18. Selling and marketing products
19. Following legal regulations
20. Maintaining facilities
21. Following safety precautions

After the task statements were grouped under the proper duty areas, each task statement was reviewed for brevity, clarity, and consistency.

Initial Inventory Validation

The initial task inventory was reviewed by six instructors of veterinary assistant programs and eleven veterinarians in various locations in the State of Ohio. The veterinarians who reviewed the task lists were selected because of their work with advisory committees of schools with programs to train veterinary lay personnel.

After securing input from these groups, extensive revisions were made in the initial list and the format of the questionnaire. The initial inventory was revised so that incumbents could review each task to determine:

1. If the task was performed at that particular veterinary practice.

2. If performed, the veterinary lay occupation responsible for performance of that task was identified. The task was also rated as to whether it was essential, useful, or not important to the designated occupation.

3. If a task was not performed in the particular practice a rating was still obtained concerning who should perform the task and the importance of the task to successful performance in the occupation.

Sample Selection

One hundred veterinarians were randomly selected from a state directory of veterinarians supplied through the cooperation of the Ohio Veterinarian Medical Association. Because it was not possible to obtain a list of the population of personnel in each of the veterinarian lay occupations, the sample of incumbents was those persons who worked for one of the veterinarians in the sample.

Data Collection

The survey was mailed on December 26, 1974. Instructions were provided with the survey instrument requesting that the instrument be completed by a responsible person within the practice. On January 15, 1975 a follow-up instrument was mailed to all veterinarians who had not yet replied, and a survey return deadline was set for January 31, 1975. No surveys were accepted beyond the deadline.

A total of 53 instruments were returned, with 40 instruments containing the required information necessary for this study.

Data Analysis

Information from the usable questionnaires was coded for key punching. Each specific task statement was coded as to whether it was performed (1 = task performed by respondent;

0 = task not performed by respondent) and the level of importance of the task (3 = essential; 2 = useful; 1 = not important). Separate code sheets were developed for each of the three occupations:

Animal Health Assistant
Animal Hospital Receptionist
Animal Health Technician

The information was key punched on IBM cards and verified by personnel at the Instruction and Research Computer Center at The Ohio State University. Computer analysis resulted in a computation of frequencies and means for each task statement. The results of a computer analysis were printed in tabular form for ease of interpretation.

FINDINGS

Necessary analyses were conducted to report findings concerning the specific tasks performed by incumbents in each of the three veterinarian lay occupations, the relative importance of the specific task to the successful employment of veterinarian lay personnel, and a comparison among the three occupations for each task. Nine per cent of the respondents received their training in high school programs, 14 per cent in technical school programs, and five per cent in nursing programs. Ninety-three per cent indicated they received training on-the-job. Training was often received from more than one source.

Tasks Performed by Workers

The 268 tasks were grouped under 21 duty areas. Each respondent checked whether each task was performed in his veterinary practice. The percentages of respondents performing each task were averaged for all tasks under each duty area. The mean percentage of incumbents who performed tasks in specified duty areas is presented in Table 1. Twenty per cent or more of the animal health assistants performed the tasks in the following duty areas (listed in order of the percentage of incumbents who performed in that area from highest to lowest):

TABLE 1

MEAN PERCENTAGE OF INCUMBENTS IN THREE OCCUPATIONS WHO PERFORM TASKS IN SPECIFIED DUTY AREAS

DUTY AREAS	Occupations		
	Assistant	Receptionist	Technician
Performing Office Work	14.8	80.4	18.6
Interpreting Medical Terminology	12.3	12.7	30.0
Recording Information	20.8	42.5	20.2
Handling and Caring for Animals	48.9	7.2	38.5
Feeding Animals	49.4	3.1	20.4
Grooming Animals	38.2	3.6	20.9
Performing Examining-Room Work	33.9	13.4	53.0
Performing Laboratory Tests	11.9	5.5	46.1
Dispensing Medicine and Supplies	23.5	22.8	36.8
Administering Medication	22.9	23.3	61.4
Assisting in Restraining Animals	51.9	26.9	45.6
Assisting with X-rays	17.5	9.7	50.7
Using and Maintaining Equipment	24.3	11.8	62.9
Preparing Facilities and Equipment for Surgery	28.1	9.7	63.4
Preparing Animals for Surgery	39.2	10.4	61.2
Performing Emergency First Aid	33.3	10.4	59.2
Inventorying Products	20.0	18.0	48.0
Selling and Marketing Products	6.6	20.9	13.6
Following Legal Regulations	11.2	20.0	32.5
Maintaining Facilities	82.5	10.5	18.0
Following Safety Precautions	62.1	20.4	44.6

Duty Area	% Performing
1. Maintaining facilities	82.5
2. Following safety precautions	62.1
3. Assisting in restraining animals	51.9
4. Feeding animals	49.4
5. Handling and caring for animals	48.9
6. Preparing animals for surgery	39.2
7. Grooming animals	38.2
8. Performing examining-room work	33.9
9. Performing emergency first aid	33.3
10. Preparing facilities and equipment for surgery	28.1
11. Using and maintaining surgical equipment and small animal care equipment	24.3
12. Dispensing medicine and supplies	23.5
13. Administering medication	22.9
14. Recording information	20.8
15. Inventorying products	20.0

Twenty per cent or more of the animal hospital receptionists performed the tasks in the following duty areas (listed in order of the percentage of incumbents who performed in that area from highest to lowest):

Duty Area	% Performing
1. Performing office work	80.4
2. Recording information	42.5
3. Assisting in restraining animals	26.9
4. Administering medication	23.3
5. Dispensing medicine and supplies	22.8
6. Selling and marketing products	20.9
7. Following safety precautions	20.4
8. Following legal regulations	20.0

Twenty per cent or more of the animal health technicians performed the tasks in the following duty areas (listed in order of the percentage of incumbents who performed in that area from highest to lowest):

Duty Area	% Performing
1. Preparing facilities and equipment for surgery	63.4
2. Using and maintaining surgical equipment and small animal care equipment	62.9
3. Administering medication	61.4

4.	Preparing animals for surgery	61.2
5.	Performing emergency first aid	59.2
6.	Performing examining-room work	53.0
7.	Assisting with X-rays	50.7
8.	Inventorying products	48.0
9.	Performing laboratory tests	46.1
10.	Assisting in restraining animals	45.6
11.	Following safety precautions	44.6
12.	Handling and caring for animals	38.5
13.	Dispensing medicine and supplies	36.8
14.	Following legal regulations	32.5
15.	Interpreting medical terminology	30.0
16.	Grooming animals	20.9
17.	Feeding animals	20.4
18.	Recording information	20.2

Duty areas in which 20% of the incumbents in all three occupations performed the tasks were: recording information, dispensing medicine and supplies, administering medication, assisting in restraining animals, and safety precautions. It was apparent from examination of the data in Table 1 that the scope of tasks performed by the receptionist was the most narrow and the breadth of tasks performed by the technician was the greatest.

Duties Essential for Successful Performance in Three Occupations

A level of importance rating was obtained for each task. The respondent could rate the task as essential, useful, or not important for successful performance in an occupation. A ranking of essential was assigned a numerical rating of "3," useful a numerical rating of "2," and not important a numerical rating of "1." The average ratings for all tasks in specified duty areas are presented in Table 2 for each of the three occupations. It is apparent from examination of the data that a high degree of correlation exists between the percentage of incumbents who perform the task and the rating assigned in Table 2.

Duty areas received a rating of 2.50 or higher for the animal health assistant follow (in order of their rating from highest to lowest):

1. Maintaining facilities
2. Following safety precautions
3. Preparing animals for surgery
4. Assisting in restraining animals

TABLE 2

MEAN RATING* OF DUTIES ESSENTIAL FOR SUCCESSFUL PERFORMANCE IN THREE OCCUPATIONS

DUTY AREAS	Occupations		
	Assistant	Receptionist	Technician
Performing Office Work	1.68	2.89	2.35
Interpreting Medical Terminology	1.85	1.98	2.38
Recording Information	2.00	2.33	2.29
Handling and Caring for Animals	2.62	1.75	2.82
Feeding Animals	2.51	1.61	2.41
Grooming Animals	2.33	1.33	2.37
Performing Examining-Room Work	2.59	2.05	2.64
Performing Laboratory Tests	1.93	1.60	2.59
Dispensing Medicine and Supplies	2.31	2.52	2.66
Administering Medication	2.27	1.58	2.82
Assisting in Restraining Animals	2.64	1.34	2.76
Assisting with X-rays	2.25	1.41	2.71
Using and Maintaining Equipment	2.25	1.41	2.78
Preparing Facilities and Equipment for Surgery	2.48	1.60	2.79
Preparing Animals for Surgery	2.69	1.00	2.84
Performing Emergency First Aid	2.60	1.31	2.72
Inventorying Products	2.37	2.06	2.71
Selling and Marketing Products	1.59	2.39	2.17
Following Legal Regulations	2.23	1.88	2.63
Maintaining Facilities	2.93	1.55	2.63
Following Safety Precautions	2.79	2.40	2.93

*Ratings were obtained by assigning these values: essential = 3, useful = 2, and not important = 1.

5. Handling and caring for animals
6. Performing emergency first aid
7. Performing examining-room work
8. Feeding animals

Duty areas receiving a rating of 2.50 or higher for the animal hospital receptionist follow (in order of their rating from highest to lowest):

1. Performing office work
2. Dispensing medicine and supplies

It should be noted that skills relating to face-to-face contact with the public were not included in this survey but might be quite critical in this occupation.

Duty areas receiving a rating of 2.50 or higher for the animal health technician follow (in order of their rating from highest to lowest):

1. Following safety precautions
2. Preparing animals for surgery
3. Administering medication
4. Handling and caring for animals
5. Preparing facilities and equipment for surgery
6. Using and maintaining surgical equipment and small animal care equipment
7. Assisting in restraining animals
8. Performing emergency first aid
9. Assisting with X-rays
10. Inventorying products
11. Dispensing medicine and supplies
12. Performing examining room work
13. Following legal regulations
14. Maintaining facilities
15. Performing laboratory tests

It was apparent that in some cases tasks were deemed essential for successful performance in an occupation even though a very low percentage of persons employed in that occupation actually performed the task. It may be that additional skills are desired beyond what incumbents now are able to perform. Also, people may naturally have higher expectations of skills needed than might actually be required for the job in which they currently function.

Composite Rating of Specific Tasks

A composite rating was calculated for each of the 268 tasks by multiplying the percentage of incumbents who perform that task by the rating of the level of importance. A value was obtained which could theoretically range from 0.00 to 3.00 for each task. These composite ratings are shown in the Table 3.

It is recommended that ratings for each task statement be examined by educators and others who are developing educational programs to determine curriculum priorities for preparing veterinarian lay personnel. Ratings with higher values should be given more emphasis in the educational program. Ratings of .40 or below would indicate a low enough priority that one might choose not to include it in the curriculum.

TABLE 3: COMPOSITE RATING* OF SPECIFIC TASKS IN THREE OCCUPATIONS

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Performing General Office Work			
Admit and dismiss patients	.46	2.23	.44
Determine purpose of visits	.14	2.34	.22
File office forms and records	.19	2.67	.33
File X-rays	.25	1.51	1.03
Greet clients	.18	2.67	.34
Notify clients of appointments	.10	1.69	.15
Operate office equipment	.21	2.30	.43
Schedule appointments	.09	2.48	.33
Use telephone	.35	2.67	.59
Wear appropriate dress for office work	.73	2.52	.88
Write memos, notes, and letters	.15	2.50	.30
Mean Rating	.25	2.15	.45
Interpreting Medical Terminology			
Identify circulatory system and function	.18	.25	.71
Identify digestive system and function	.23	.32	.83
Identify endocrine system and function	.18	.25	.65
Identify general anatomy and physiology terms	.47	.50	1.13
Identify integumentary system and function	.23	.30	.72
Identify major disease terminology	.35	.54	1.17
Identify major muscles and function	.17	.18	.57
Identify major skelatal components and function	.35	.26	.77
Identify nervous system and function	.17	.20	.64
Identify reproductive system and function	.14	.25	.90
Identify respiratory system and function	.30	.25	.71
Identify urinary system and function	.30	.28	.91
Identify various chemical terms	.18	.15	.81
Identify various microscopic cell and tissue terminology	.12	.14	.95
Interpret chemical formulations	.04	.04	.30
Mean Rating	.22	.25	.78

*Ratings were calculated by multiplying the percentage of incumbents who performed the task and the degree to which the tasks were rated as essential for successful performance in the occupation. Values could theoretically range from 0.00 to 3.00.

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Recording Information			
Balance daily cash statements	.12	1.70	.25
Balance monthly bank statements	.05	1.02	.07
Deposit daily cash receipts	.13	1.27	.07
Develop graphs and charts	.12	.34	.15
Maintain accounts receivable and accounts payable	.05	1.95	.07
Receive payments for accounts	.17	2.40	.24
Record bowel movement information	2.12	.23	.73
Record feeding information	2.17	.14	.65
Record general client information	.38	2.15	.41
Record general patient information	.96	1.42	.69
Record medication information	.92	.92	1.32
Record or attach complete pedigree record	0	.03	.20
Record surgery information	.34	.81	1.32
Record vaccination information	.25	1.97	.80
Record weight information	.68	.73	1.34
Write checks	0	.61	.10
Mean Rating	.52	1.15	.52
Handling and Caring for Animals			
Assist animals in delivering young	.70	.13	1.48
Assist animals in nursing	.72	.11	1.62
Check if animals are pregnant	.05	0	.25
Collect bowel movements	2.08	.07	.83
Control animals when handling	2.10	.27	1.75
Estimate weight of animals	1.26	.13	1.35
Evaluate overall condition of animal	1.20	.03	1.17
Exercise animals	2.26	0	.54
Identify animal heat signs	1.47	.25	1.40
Identify animals	2.08	.87	1.36
Identify breeding methods	.31	.04	.53
Induce bowel movements	1.04	.04	1.15
Observe animals regularly for problems	2.05	.17	1.33
Place animals in holding pens	2.26	.08	.83
Provide proper environment for bred animals	.69	0	.58

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Regulate air movement and temperature in holding areas	1.27	.05	.54
Separate non-compatible animals	1.83	.10	.63
Take pulse	.58	.03	1.32
Mean Rating	1.21	.13	1.03
Feeding Animals			
Add medication to feeds	1.71	.04	1.17
Determine amount of feed required by animal	1.95	.05	.84
Determine how often animals should be fed	1.76	.05	.72
Determine nutritional requirements of animals	.69	.08	.64
Determine when animals should be fed	1.48	.04	.86
Determine which feeds may be fed animals	1.00	.04	.46
Feed pre-surgical diet	.99	.04	.11
Identify basic components of feeds	.13	0	.09
Interpret information found on feed labels	.38	.04	.19
Interpret nutritional feed charts	.19	.04	.14
Place feed in containers	2.13	.08	.55
Prepare feed	2.51	.08	.56
Provide water for animals	2.48	.08	.55
Mean Rating	1.33	.05	.52
Grooming Animals			
Bathe animals	2.14	.23	.41
Clean ears	1.49	.23	1.11
Clean teeth	.72	.23	1.57
Clip nails	1.63	.25	1.59
Comb animals	2.01	.07	.56
Drain anal sacs	.77	.23	.69
Dry washed animals with towels and dryers	1.63	.07	.54
Identify clipping problems	.95	.11	.38
Identify water and soap differences	.80	.04	.23
Paint nails	.03	0	0
Perform post-clipping procedures	.37	.03	.05
Perform various clipping patterns	.47	0	.10

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Perfume animals	.32	0	.05
Pluck hair	.43	.04	.50
Mean Rating	.98	.10	.55
Performing Examining Room Work			
Apply bandages	.46	.08	1.61
Assist in diagnosing infectious and non-infectious diseases	.05	0	.55
Assist in treating diseases	.36	.04	1.64
Assist the veterinarian in determining control procedures for diseases and parasites	.30	.03	.83
Change bandages	.91	.23	1.70
Disinfect examining table and equipment	1.33	.85	1.83
Identify external parasites	1.24	.32	1.95
Place and restrain animal on examining table	1.94	.34	1.63
Prepare examination room area	1.37	.96	1.48
Use appropriate disinfectants	1.50	.68	1.33
Use proper taping techniques	.58	.10	1.15
Mean Rating	.91	.33	1.42
Performing Laboratory Tests			
Analyze fecal samples	.82	.55	1.96
Chemically examine urine	.34	.20	1.76
Classify sediments in urine	0	0	1.28
Collect urine sample	1.33	0	1.54
Convert English measurements to metric measurements	0	0	.60
Determine coagulability of blood	0	0	.66
Identify bacteria	0	0	.58
Identify parasites and parasite eggs	.57	.28	1.96
Measure solids and liquids	.22	.10	1.02
Operate centrifuge tube	.29	.17	1.81
Perform direct smear method	.16	.10	1.51
Perform flotation method	.70	.53	2.06

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Perform hemoglobin determination	.09	.13	1.25
Perform "McMaster Technique"	.03	0	.15
Pipette liquids	.06	.03	1.02
Prepare and stain blood smears	.20	0	1.51
Prepare bacterial cultures	.09	.03	1.01
Prepare, innoculate, and incubate cultures	.09	.03	.80
Prepare miscroscope slides	.25	.10	1.35
Preserve fecal samples	.35	.05	.64
Set-up and adjust microscope	.41	.07	1.64
Take blood sample	.30	.08	1.43
Titrate reactions	.03	.03	.39
Use laboratory sticks	.27	.13	1.76
Mean Rating	.27	.11	1.23
Dispensing Medicine and Supplies			
Destroy empty containers	1.10	.45	.75
Interpret prescription requests	.20	.59	.89
Interpret product labels	.22	.31	.97
Label drug containers	.43	.86	1.62
Maintain orderly storage shelves	.92	.70	1.40
Measure exact amounts for prescriptions	.39	.68	1.60
Prepare animal drug form	.04	.22	.54
Store products in proper areas	1.32	.79	1.53
Transfer products to various size containers	.91	.51	1.25
Use drug coding system	.32	.58	.67
Mean Rating	.58	.56	1.12
Administering Medication			
Administer IM injection under supervision	.35	.08	1.78
Administer IV injection under supervision	.37	.38	1.59
Administer oral medication under supervision	.85	.47	2.09
Administer rectal medication under supervision	.71	.45	1.49
Administer subcutaneous injection under supervision	.42	.29	2.11

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Administer surface medication under supervision	.89	.46	2.18
Fill syringe	.55	.48	1.94
Identify and select animal's proper medication	.25	.70	.81
Interpret veterinarian's medication prescription	.54	.38	1.53
Locate injection points on animals under supervision	.25	.15	1.83
Select proper needles	.44	0	1.94
Sterilize injection equipment	.79	.18	1.64
Mean Rating	.53	.33	1.74
Assisting in Restraining Animals			
Apply pneumatic collar	.57	.26	.54
Apply various muzzles	1.68	.10	1.29
Form temporary muzzle	1.68	.13	1.44
Identify animal's moods	1.55	.31	1.51
Open animal's mouth	1.45	.56	1.46
Properly approach animal	1.91	.62	1.66
Restrain animal's head	1.86	.19	1.61
Tape legs	.65	.43	.62
Tie animal to table	1.22	.65	1.42
Mean Rating	1.39	.36	1.28
Assisting with X-Rays			
Adjust cassette holder	.57	.05	1.90
Adjust X-ray machine settings	.36	.08	1.42
Analyze film development problems	.22	.08	1.17
Clean processing tanks	.78	.08	1.25
Develop film	.74	.08	2.08
"Fix" film	.60	.08	2.00
Identify developing chemicals	.51	.08	1.40
Identify normal X-ray positions	.51	.06	1.69
Interpret metric measurements	.13	.12	.72
Maintain standards on machine settings	.27	.26	1.22

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Maintain water and solution temperatures	.48	.09	1.94
Measure part of animal to be examined	.44	.20	1.74
Mix and replace developing solution	.43	.21	1.19
Operate high-low kilovoltage switch	.20	.17	1.32
Position and read X-rays	.09	.11	.75
Position animals for X-rays	.52	.24	2.02
Read technique charts for X-ray equipment	.20	.15	1.41
Read voltmeter	.18	.23	1.23
Record millimeter register	.13	.11	.99
Remove film from cassette	.45	.10	2.01
Set automatic timer	.35	.10	1.72
Set-up field X-ray equipment	.15	.10	.15
Store X-rays	.56	.33	1.73
Trim processed X-rays	.35	.23	.98
Use appropriase aprons and gloves	1.02	.20	2.18
Use processing equipment	.48	.06	1.41
Use proper film	.60	.16	1.78
Use proper screened cassettes	.40	.13	1.56
Warm-up X-ray machine	.24	.09	1.34
Mean Rating	.41	.13	1.45
Using and Maintaining Surgical Equipment and Small Animal Care Equipment			
Check equipment for defects	.75	.20	1.81
Clean and disinfect instruments and equipment	.99	.14	2.04
Identify anesthesiology equipment	.47	.12	2.00
Identify bandage and stitch scissors	.86	.16	1.95
Identify canine tonsil snares	.69	.26	1.49
Identify cauterizing equipment	.58	.06	2.06
Identify dental equipment	.68	.22	2.16
Identify fracture equipment	.61	.30	2.14
Identify post-mortem equipment	.55	.07	1.90
Identify probes, seekers, and dry dissectors	.40	.09	1.51
Identify scissor tips	.59	.09	1.94
Identify surgical blades and scalpels	.64	.25	2.03
Identify transfusion equipment	.45	.03	1.85
Identify various catheters	.30	.11	2.11

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Identify various forceps	.58	.11	2.08
Identify various hemostats	.45	.07	1.99
Identify various injection equipment	.52	.07	2.03
Identify various suture needles	.65	.11	2.10
Identify various syringes	.54	.07	2.08
Interpret equipment operation instructions	.45	.03	1.73
Maintain air cleaner	.58	.11	.75
Select appropriate equipment for specific jobs	.74	.19	1.83
Sterilize instruments and equipment	.76	.17	2.13
Store various instruments and equipment	.87	.23	2.04
Use and maintain various scales and balances	.72	.07	1.24
Use and maintain X-ray equipment	.28	.11	1.63
Use colorimeter	.13	.08	1.17
Use hemogram machine	.12	.08	.74
Use incubators	.23	.07	1.06
Use urinometer	.37	.10	1.51
Mean Rating	.55	.12	1.77
Preparing Facilities and Equipment for Surgery			
Clean surgery room	1.57	.15	1.53
Control ventilation and temperature in room	.82	.10	.83
Lay-out surgical equipment	.51	.33	2.14
Perform scrubbing technique	.61	.22	1.92
Prepare drugs and chemicals	.37	.20	1.87
Prepare standard and special surgical packs	.63	.08	2.09
Prepare sterile bundles and germicide basins	.61	.08	1.99
Prepare sterile gowns, caps, and masks	.59	.08	1.90
Mean Rating	.71	.15	1.78
Preparing Animals for Surgery			
Assist in anesthetizing animals	1.24	.08	1.96
Clip animal hair	1.21	.08	1.69
Drape and position animal	.63	.15	1.77
Shave animal hair	.93	.10	1.84
Wash animals	1.38	.15	1.19

TASK STATEMENTS	Occupations: Assistant	Receptionist	Technician
Wash operative area on animal	.95	.08	2.04
Mean Rating	1.05	.10	1.74
Performing Emergency First Aid			
Administer artificial respiration	.87	.13	1.88
Administer oxygen	.79	.12	1.95
Apply antiseptic	.84	.16	1.95
Apply minor medication	1.00	.13	1.99
Cleanse wounds	.85	.16	1.79
Identify internal hemorrhaging symptions	.52	.13	1.26
Identify shock symptons	.82	.13	1.80
Identify various external bleeding problems	.81	.13	1.62
Isolate suspected rabid animals	.77	.15	.67
Maintain body temperature	1.17	.15	1.24
Prepare and transport emergency victims	1.07	.15	1.28
Prepare patient for transfusion	.67	.15	1.91
Stop external bleeding	1.00	.10	1.67
Mean Rating	.86	.13	1.61
Inventorying Products			
Determine when supplies need to be ordered	.55	.48	1.72
Remove contaminated items from stock	.53	.25	1.55
Remove expired products from inventory	.46	.28	1.45
Take physical inventory of supplies	.49	.55	1.37
Use stocking forms	.35	.32	.45
Mean Rating	.47	.37	1.30
Selling and Marketing Products			
Complete sales slip	.09	.55	.21
Demonstrate items for sale	.07	.28	.14
Determine whether product requested is on hand	.15	.63	.74

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Handle customer complaints	.12	.51	.35
Make change	.10	.78	.40
Meet customers	.10	.78	.29
Operate cash register	.08	.53	.14
Prepare and arrange displays of products	.03	.29	.03
Price products for customers	.12	.27	.26
Stock shelves	.33	.47	.95
Use billing machine	.08	.52	.09
Mean Rating	.11	.51	.32
Following Legal Regulations			
Determine what duties may legally be performed by the animal care assistant	.29	.42	.80
Determine which materials may be sold without prescriptions	.22	.33	.91
Mean Rating	.25	.37	.85
Maintaining Facilities			
Clean feeders	2.48	.13	.39
Clean holding pens, cages, and runs	2.60	.10	.59
Clean waiting room	2.08	.49	.47
Disinfect pens	.85	.10	.47
Dispose of residues and trash	2.50	.10	.45
Mean Rating	2.10	.18	.45
Following Safety Precautions			
Apply first aid to minor cuts, bruises, and burns	1.17	.41	1.79
Follow safe work habits	2.18	.68	2.18
Identify potential safety hazards	2.10	.49	2.01
Store chemicals safely	1.12	.30	1.70
Use fire extinguishers	1.87	.56	1.80

TASK STATEMENTS	Occupations		
	Assistant	Receptionist	Technician
Wear appropriate protective clothing	2.05	.54	2.02
Mean Rating	1.74	.48	1.91

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SUMMARY OF RESEARCH SERIES

A basic requirement for developing and improving curricula in vocational education is information concerning the tasks which are essential for successful performance in the occupational areas for which students are being prepared. Little of this type of information was available to Animal Production and Management curriculum developers in Ohio. Therefore, this study was designed to support current curriculum development efforts.

The authors are recognized for their scholarship in preparing this summary. Dr. McCracken is an Associate Professor of the Department of Agricultural Education and Frederick Cooke was a Graduate Research Associate in the same department when the information was prepared. Special appreciation is due Sidney D. Borcher, Director, Arizona Research Coordination Unit, Phoenix; Donald Gisler, Doctor of Veterinary Medicine, Sylvania, Ohio; and Al Penn, Instructor, Animal Production and Management, Montgomery County Joint Vocational School, Dayton Ohio for their critical review of the manuscript prior to its acceptance for publication.

Research has been an important function of the Department of Agricultural Education since it was established in 1917. Research conducted by the Department has generally been in the form of graduate theses, staff studies and funded research. It is the purpose of this series to make useful knowledge from such research available to practitioners in the profession. Individuals desiring additional information on this topic should examine the references cited in the bibliography.

J. Robert Warmbrod
Department Research Committee

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